

## New Acalyptrate Diptera from the Pacific and Oriental Regions.

BY J. M. ALDRICH

U. S. National Museum

(Presented by Mr. Bryan at the meeting of February 7, 1929)

Several of the new species here included have been awaiting identification for some time, having been collected by Mr. Bryan in 1923. The others have been received more recently from several collectors. The type material is in the U. S. National Museum and the Bernice Pauahi Bishop Museum, as indicated.

### ***Atissa antennalis***, new species.

*Female*.—Length .94 mm. Uniform dark brown in color, face and cheeks with slightly more gray pruinosity. Wings blackish, the costal segment before the tip of the second vein equal to the one beyond it; third vein ending in apex; hind crossvein with slightly deeper infuscation. Antennae dark brown, the short-plumose arista arising from the base of the third joint, outer side of the joint at apex with about five distinct white hairs of considerable length. Tarsi yellowish brown.

Described from two specimens collected on Necker Island, June 18, 1923, by E. H. Bryan, Jr., "ex pools salt water."

*Type*.—Female, Cat. No. 41630, U. S. N. M. Paratype deposited in Bishop Museum, Honolulu, Hawaii.

The species resembles *Atissa pygmaea* Haliday in all points of structure, including the sparseness of the acrostichal hairs, which are in four scattering rows between the dorsocentrals. The color agrees very well with *A. limosina* Becker, collected on the coast of Norway, but that species seems to have the wings less infuscated and the crossvein more distinctly so; and I can find no reference in the description to the peculiar pale hairs of the third antennal joint which seem to be a striking feature of the present species.

### ***Tethina insularis***, new species.

*Male*.—Length 2.2 mm. Body rather elongate; thorax brown; head, legs and scutellum yellow. Abdomen black. Front rather dark yellow, the orbitals lighter; orbitals 3, the first and third reclinate and divergent, second divergent. Three pairs of inner frontal bristles converging toward the antennae; ocellars distinct, divergent; two pairs of verticals; post-verticals

convergent. Front narrow to the antennae where it is a little over one and a half times as wide as at the posterior ocelli. Parafacial narrow; cheek only one-sixth the eye height; eye nearly round; a row of bristles at edge of mouth, ending in a distinct vibrissa; proboscis short and rather stout, with conspicuous labella folded back and a distinct, thin outer margin forming a deep groove into which the middle part of the proboscis folds; face rather concave; third antennal joint round, infuscated on apical half, the arista slightly pubescent. Mesonotum with four pairs of dorsocentrals and an equally large pair of prescutellars; acrostichal hairs between the dorsocentrals in six distinct rows. Scutellum flat, rather triangular, yellow toward apex with two pairs of bristles, otherwise bare. Humeri rather yellow; pleurae brown; mesopleura hairy with one ascending bristle near upper edge and one large and two small along hind margin; sternopleural with one bristle; knob of halteres brown. Abdomen black or dark brown with a row of bristles along the hind margin of each segment. Wing subhyaline; auxiliary vein evanescent except at base; first vein short; second diverging from third and ending a little before the tip of wing; last section of fourth vein about one and two-thirds times preceding; last section of fifth vein hardly more than half the preceding; discal cell separated from the second basal; basal cells minute; small crossvein at two-fifths of the discal cell.

Described from 13 specimens, apparently all males; 11 are from Wake Island, June 30, 1923, collected by E. H. Bryan, Jr., and two collected at Pearl and Hermes Reef, Hawaii, by D. T. Fullaway, April 27, 1923. The last two differ only in having the last two tarsal joints black in all the feet, which is only slightly indicated in the other series.

*Type*.—Male, Cat. No. 41629, U. S. N. M., from Wake Island.

Paratypes from both localities returned to Bishop Museum.

I place this species in the genus *Tethina* because it seems to agree very well with *T. albula* Loew, the principal difference being that the eye is larger and the cheek considerably narrower; the structure of the front agrees very well. I do not have access to the genotype of *Tethina* (*illota* Haliday).

#### **Bryania**, new genus.

Like *Asteia* (the genotype, *amocna* Meigen) in venation, and in having one pair of erect scutellar bristles arising considerably before apex; two pairs of erect dorsocentrals; inner and outer verticals, the former somewhat convergent; post-verticals absent; one reclinate pair of frontals, and distinct vibrissae. Differs in having the head elongated, the front prominent and almost horizontal, much overhanging the face; the eye elongated, and the cheek quite long and one-third as high as the eye.

*Genotype*.—*Bryania bipunctata* new species.

**Bryania bipunctata**, new species.

*Female*.—Length 1.6 mm. Front yellow, opaque; ocellar triangle black but densely opaque with gray pollen; ocellars minute; a brown stripe from eye to base of antennae; antennae brown, third joint whitish on lower third, arista missing; face concave below antennae, light gray in color, with a pair of small black spots on middle; cheeks and palpi almost white. Thorax elongate, densely gray pollinose, yellow in ground color, with two pairs of black stripes so heavily cinereous that they are little visible; scutellum light yellow; pleurae yellow with dull black stripe on lower two-thirds of sternopleura continuing above hind coxae, and another above it beginning on pteropleura; several pale bristly hairs on the pale upper edge of sternopleura. Abdomen with alternating bands of black and yellow, in poor condition. Legs yellow. Wings hyaline, with a black dot on the closely approximated tips of the first and second veins.

Described from two females, collected on Nihoa Island, Hawaii, June 13, 1923, by E. H. Bryan, Jr., after whom the genus is named, in honor of his services in making known the insect fauna of the Pacific Islands.

*Paratype*.—Female, Cat. No. 41628, U. S. N. M. The type is returned to the Bishop Museum, Honolulu.

The two species of *Asteia* from Hawaii named by Grimshaw in *Fauna Hawaiiensis* (Diptera, p. 73) are quite distinct from the present species and appear to be true *Asteias*.

**Milichiella circularis**, new species.

*Male*.—Rather dull black in color, the abdomen broadly expanded, circular and almost wholly silvery. Head as in *lacteipennis* Loew, quite narrow just below the antennae, the vibrissae far above the mouth; a distinct excision in the back of the eye about the middle. Antennae small, black; arista slender, bare. Palpi black. Thorax uniformly black, a little shining, with rather dense suberect hairs. Dorsocentral 2, the anterior smaller; mesopleura bare, shining; sternopleura with 2 large and 2 or 3 smaller bristles; calypters white, hind edge with a slight brownish tinge which is sometimes rather conspicuous; the fringe of hairs, however, is pale. Halteres black, including stem. Dorsum of the abdomen with the following parts silvery: sides of second segment, all of third except a posterior dark band on the middle half which takes in a little less than half the length of the segment; fourth segment wholly, except a very narrow dark border along the middle half, not sharply limited; fifth segment, except the apical third in the middle portion. The silvery part of the abdomen is almost entirely destitute of hairs, which are rather coarse and black on the black portions. The legs, including tarsi, wholly black. Wings subhyaline, not at all milky; costa

with deep incision at first vein; fourth vein converging toward third, which ends just behind apex. Last section of fourth vein about one-fourth longer than the preceding. Last section of fifth vein hardly longer than hind cross-vein, less than one-fourth the preceding section of fifth.

Length, 2.8—3 mm.

Described from 6 males collected in pineapple fields in Hawaii by J. F. Illingworth, and 8 males collected "near compost," Honolulu, by O. H. Swezey. The type (from the first lot) and 4 paratypes are returned to the Bishop Museum, Honolulu.

*Paratype*.—Male, Cat. No. 41489, U. S. N. M.

Comes nearest to *cingulata* from Bolivia in Becker's key (Ann. Mus. Nat. Hung. v, 1907, 532), but differs in having the fourth vein distinctly converging to third, its last section less than twice the preceding, etc.

**Milichiella bakeri**, new species.

*Male*.—Head and thorax black, but little shining. Abdomen considerably expanded, wholly silvery above except the first segment and the lateral angles of the second; head as in *lacteipennis* Loew and *circularis* new species. Antennae and palpi black, the latter quite broad; proboscis small, but the labella folded back. A distinct emargination in the back of the eye above the middle; thorax with rather dense, suberect hairs; mesopleura bare; sternopleura with two bristles; halteres wholly black; calypters black with brown hair. Abdomen a little wider than thorax, but the silvery portion is considerably turned down at the sides, indicating that it might be expanded almost into a semicircular form. At the edge of the silvery portion ventrally is a conspicuous dense row of bristles running along on the segments. Second to the fifth segments with some coarse black hairs on the hind part. Legs black, tarsi reddish yellow. Middle femur with dense bristles on front side on the apical half. Wings almost hyaline, slightly brownish on costal half. Venation as in *circularis*.

Length, 2.8 mm.

Described from 3 males, collected on Mt. Makiling, Luzon, P. I., by Prof. C. F. Baker.

*Type*.—Male, Cat. No. 41490, U. S. N. M.

Closely resembles *argyropasta* Perris of Europe, which I have not seen: judging by Mik's detailed description (as *tiefi*, a synonym), the distinctly yellow tarsi of *bakeri* are distinctive. From *spinthera* Hendel (Suppl. Ent., 1913, 107), a Formosan species, *bakeri* differs in the dark calypters.

**Milichiella smithi**, new species.

*Male*.—Black, including halteres, antennae, and palpi; the tarsi however reddish yellow. Head about as in *lacteipennis*, back of eye notched, the front narrow at the antennae and the vibrissae extending up to the antennal depression. Dorsum of thorax black, subshining in front, gradually overlaid with thin silvery pollen which is quite striking on the posterior half; the scattered hairs and bristles arise from dark dots in this pollen. Scutellum black, subshining, not silvery. Dorsocentral one pair; calypters brown with blackish fringe.

Abdomen broad and flat, uniformly silvery above except a black depressed triangle under the scutellum; the second and fifth segments elongated; second to fourth with a thin row of small dark bristles near the hind edge, not arising from dots; sides of segments two to five silvery on the portion which is bent vertically downward and which perhaps in life can be raised to a level with the remainder of the dorsum so as to give the abdomen a circular outline with uninterrupted silvery sheen.

Wings hyaline, not milky; third and fourth veins a little convergent at tip; last segment of fourth vein more than twice the preceding; hind cross-vein at right angles to axis of wing, slightly longer than last segment of fifth vein.

Length, 2.4 mm.

Described from 24 males collected at Bangkok, Siam, April 23 and October 27, 1928, by Dr. Hugh M. Smith, after whom the species is named.

*Type*.—Male, Cat. No. 41719, U. S. N. M.

In Becker's key to the genus this species runs only as far as the fourth couplet, differing from all the others in having the dorsum of the thorax distinctly silvery.